

**V. Contributions to the Surgery of the Gall-Bladder.** By DR. K. KLINGEL (Heidelberg-Weisloch). Of this article 15 of the 28 pages are devoted to the history of operations on the biliary passages, and a review of previous cases. He mentions Marion Sims as the founder of modern cholecystotomy (1878). Extirpation of the gall-bladder (cholecystectomy) was introduced by Langenbuch (1882). Winiwarter (1880) attempted to form a fistula between gall-bladder and small intestine, whilst Kappeler (1887) was the first to perform a one-act cholecystenterostomy.

Four new cases from the Heidelberg clinic are then given, one of cholecystectomy and three of cholecystotomy.

1. Woman, *æt.* 32 years. Impaction of gall-stones in cystic duct, empyema of gall-bladder, circumscribed purulent peritonitis. Cholecystotomy. Death next day. It was doubtful whether the operation had hastened the fatal termination.

2. Woman, *æt.* 42 years. Exploratory aspiration of 10 cm. pus. Cholecystectomy for empyema and pericystitis (of gall-bladder.) Vast number of small calculi, estimated at 1000, a couple being impacted in the duct. Paravesical abscess. Primary union of wound and general improvement for a time. Then rapid development of embolic thrombosis of pulmonary artery, and death 19 days p. o. The autopsy showed an encapsulated abscess containing bilious pus, at about the seat of the extirpated viscus. This did not communicate with the stump of the cystic duct. There were extensive adhesions of surrounding parts.

3. Woman, *æt.* 49 years. Here an operable cancer had been diagnosed, but the operation disclosed the tumor to be the gall-bladder tensely filled with concretions. Cholecystotomy. Suture of bladder to abdominal wound. First change of dressing on ninth day, removal of skin sutures. Second change seven days later, removal of the deeper sutures. Further course uniform. Cure. The previously present dilatation of the stomach and allied symptoms leading to the diagnosis of cancer disappeared. In a foot note Czerny states that he operated another case successfully according to this method in February, 1889.

4. Woman, æt. 50 years. Angiosarcoma of the gall-bladder, with gall-stones. Incision. Discharge of pus and calculi. Material obtained by scraping out the cavity showed the nature of the primary trouble. Later a marked tumor developed but its removal was not permitted.

He gives the indications for operations on the biliary passages briefly as follows: 1, cholelithiasis; 2, dropsy and empyema of the gall-bladder; 3, closure of the choledochic duct; 4, wounds of the gall-bladder. To these tumors of the bladder might be added, only that benignant can scarcely be diagnosticated *intra vitam*, and malignant run such a rapid course that their operation is rarely possible. Furthermore he takes the ground that though this bladder is perhaps not very necessary, still on general principles it should only be removed for due cause.—*Brun's Beiträge f. klin. Chirg.*, 1889, bd. v, hft. i.

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**VI. Effects of Extirpation of the Gall-Bladder.** By D. R. Oddi (Bologna). Oddi extirpated the gall-bladder in three large dogs, and following the operation found gall pigment in the urine, the voided stools of a fluid character, deeply colored and mixed with mucus; in the meanwhile the animal, despite a great voracity, becoming greatly reduced. After from one and a half months, the pigment begins to disappear, the fecal matter becomes less fluid, the voracity decreases and the general condition is improved. These phenomena are explained by Oddi by the fact that there occurs a continuous flow of bile into the intestine, the coloring matter of which is absorbed, while the constant presence of the bile in contact with the mucous membrane produces a catarrhal condition of the same. In addition to this, through a diminution of the bile, at the point where the chyme enters the duodenum, the emulsifying process of fatty matters, and, consequently, the whole digestive function, as well, are interfered with. This explanation is supported by the fact that in a control animal, in which Oddi established a gastro-biliary fistula, with ligature of the ductus choledochus, the operation was followed by the appearance of copious gall pigment in the urine but by neither diarrhoea nor decrease